

1 Interview Summaries

1.1 Public Utilities Commission (MPUC)

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| Interview Type | Personal, State Agency |
| Interview Location | PUC Office, Augusta |
| Interview Date | October 10, 2001 |
| Summary Date | October 28, 2001 |
| Interviewer | AGI / Richard Sutton (rs@appgeo.com) MeGIS / Dan Walters |
| Interviewed: | Thomas Welch, MPUC Chairman Dennis Keschl, Administrative Director *Joe Sukaskas (joe.sukaskas@state.me.us) |
| Staff Size (approx) | 62 |
| Budget (approx) | \$5,000,000 |
| URL: | http://www.state.me.us/mpuc/ |

1.1.1 Agency Overview

The MPUC is an independent agency of the State of Maine consisting of three commissioners and a staff of 58, created by the Maine Legislature "to assure safe, reasonable and adequate service at rates which are just and reasonable to customers and public utilities." The Commission has jurisdiction over water utilities, electric utilities, water carriers, gas utilities, telephone utilities, and resellers of telephone services. The MPUC is governed by Title 35-A of the Maine Revised Statutes Annotated (35-A M.R.S.A.).

1.1.2 GIS Initiatives

1.1.2.1 Overview of GIS Utilization

The MPUC needs to be able to use GIS to visually assess the numerous utilities it regulates and to generate maps that characterize its findings for presentation before the state legislature. To date MPUC has been utilizing GIS to "clearly spell out what it needs to know to pass good laws and set rates." This presently includes monitoring service area boundaries, cell tower locations and emergency management data, among other initiatives.

MPUC currently uses internal GIS for:

- monitoring electrical outages and clearances
- identifying and visualizing authorized service areas of utility providers, in addition to key infrastructure components and basemap data.
- presentation maps before legislature to illustrate
- Exchange boundaries
- Cell towers
- Emergency management support
- Storm restoration outage areas

1.1.2.2 GIS Operating Environment and Infrastructure

The MPUC currently maintains:

- ESRI ArcView 3.2: (3) seats
- 1 Citrix license for using ArcGIS served from MeGIS.

1.1.2.3 GIS Data Resources and Requirements

1.1.2.3.1 Spatial Data

The MPUC requires numerous standard mapping layers in order to accurately visualize the operational and regulatory status of the utilities it regulates.

Existing data sets include:

Basemap features: Roads, political boundaries, hydrological features, etc.

Analysis layers, including:

Bangor Hydro Electric Co. customer locations from GPS (2000)

North American electric transmission lines (1997)

Portland Natural Gas Transmission System lines (1997)

US Department of Energy EIA Natural Gas Database, MapInfo version (2000)

FEMA Hazards Database, ArcView version (2000)

Currently unavailable but desired data sets include:

Complete and up-to-date service area boundaries

Accurate utility infrastructure data (as captured and shared by utilities)

Enhanced basemap data (e.g. orthophotography, landuse, roads, high accuracy planimetrics where available)

1.1.2.3.2 Attribute Data

MPUC estimates that, while most tabular data is not provided to the Commission in map-ready format, at least 50% could be spatially enabled (geocoded or addressmatched) with relative ease. These attribute data sets include:

Consumer complaints (6 years legacy data in Oracle)

1.1.2.3.3 Data Issues

Legacy data are perceived to be relatively unimportant, though it would be useful to see:

History of complaints

Service outages

MUPC is working to require utilities to provide data in GIS or GIS-ready format to track regulatory filings.

1.1.2.4 GIS Applications and Application Requirements

Currently, MPUC uses the GIS primarily for presentation mapping and ad hoc analysis. MPUC would like to see the GIS program continue to evolve with a goal 3-4 staff competently using GIS in the next 12-18 months as an integral part of its ongoing analysis efforts. MPUC also understands the necessity of establishing efficient and simplified GIS data interchange with all relevant state, regional and local spatial data sources as well as regulated utilities.

Planned future GIS activity and applications:

- Identify service problem clusters (model utility consumer distances from central distribution offices)
- Locate inexplicable rate differentials
- Provide graphical assistance in disaster recovery efforts in cooperation with utilities
- Visualize pricing and service quality patterns
- Enforce DigSafe
- Analyzing high probability wire break areas based on accurate land cover data
- Promote public safety
- Foster and track economic development

1.1.3 Other Relevant Issues

- The PUC has rulemaking authority, and statute allows it full access to all data collected and maintained by regulated utilities. This potentially provides a vehicle for institutionalizing data sharing between the PUC and utilities.
- Tom Welch and MPUC are advocates of Edward Tufte, author of The Visual Display of Quantitative Information. This indicates a sense of the capabilities of GIS technology for distilling the complexities of their business mission into manageable and presentable maps and presentations.

1.1.4 Major Benefits and Cost Justification

The benefits to MPUC of a well-developed GIS will accrue in two primary categories: Presentation map production and ongoing informed analysis. MPUC seeks to quickly and efficiently undertake spatial analysis and integrate the products of this into appropriate presentation mapping products